Amendments to the Abstract:

Please cancel the previous Abstract and replace it with the following rewritten abstract.

Described is an error control method for multilevel memory cells operating with a variable number of storage levels. The method includes: receiving a first information word having k input symbols each in a first base; converting the first information word into a second base by converting the input symbols into input symbols in the second base; encoding the converted first information word into a first codeword having k + n coded symbols in the second base; and writing the first codeword into the multilevel memory cells. The encoding step may include generating a generating matrix and multiplying the first information word by the generating matrix to produce the first codeword.